

Fuels Overview: The Gamut Revisited

John Segar, Wildland Urban Interface Coordinator, NPS-FMPC

Healthy Forest Initiative (HFI)

The 2000 fire season and the Cerro Grande Fire brought about the National Fire Plan (NFP) under the Clinton Administration. It evolved during the Bush Administration into the Healthy Forest Initiative (HFI). While the politicians emphasized the differences, changes for field staff were minimal. Both the NFP and the HFI focus on proactive stances for forest management.

Wildland Urban Interface (WUI)

After 2000 the Wildland Urban Interface Initiative (WUI) was introduced to fight the fuel battle. The initiative was to save lives, property, resources and money by investing in hazardous fuel reduction and community protection and preparation. However, it is impossible to turn around 70 to 100 years of fuel buildup in two years. For years, the first priority of wildland fighting was to protect lives and structures, but during that time the fuels kept accumulating and now every part of the United States has issues with fuels build-up.

The Fire Behavior Triangle is comprised of fuels, weather and topography. Fuel is the only side of the fuel triangle which man can manipulate/manage. Fuels management is the process of moving from current fuels conditions to desired fuels conditions. The Fire Management Plan is the path to reach that desired condition and may include use of mechanical removal, chemical treatment, prescribed fire, fire suppression and natural fire to attain that condition.

Generally, the more intense fuels treatment is, the higher the cost, but the more quickly the desired condition is reached. Prescribed fire is cheaper, but may take several treatments. Fuels management today involves a number of issues including the wildland-urban interface, contracting, mechanical utilization, Fire Regimes I, II, III and Condition Classes I, II and III, as well as collaboration.

Contracting

John discussed the need to contract out for work associated with fire management. For 2004 the NPS is being directed to contract out 50 percent of its fuel management. Contracting has always been a large part of firefighting and will become more prevalent in other aspects of fire management.

Mechanical removal

Mechanical removal has not been used in many NPS units. In many cases, the NPS culture of resource preservation, combined with general inexperience in managing mechanical treatments, has created a bias in the National Park Service against mechanical treatments. The reality is that while mechanical treatments are not appropriate for all fuels treatment projects, there are many NPS units where mechanical treatments are appropriate and can be managed cost effectively and to minimize resource impact. We need to remember our accountability to the public. It is our duty and our way of showing the public we are using money wisely and getting things done. We should therefore consider using the right tool for the right job and regardless of past thinking

Collaboration

Collaboration needs to be explored and improved in the fire community and local areas to explore what can work for them. WUI targets high-risk communities that are on lists established by the states, however, collaboration between all agencies involved should help set priorities for WUI projects.

Collaboration takes time and patience, and must take into account all parties including our peers, and public and elected officials.

Example:

A community makes the decision through collaboration to use mechanical removal of fuels instead of prescribed fire due to smoke issues. Though mechanical treatment is more expensive, due to health concerns of those in the community (elderly, asthma sufferers, etc.), mechanical treatment may be more practical.

Utilization

The NPS has not conducted traditional timber sales as a way to remove fuel loads, however there are several pilot projects for fuel removal that are using contractors who will remove cut timber and sell it. These options needs to be explored very carefully. Utilization of fuels is a good practice to reduce fuel loads, but is not always practical due to size and quality of the trees being removed.

Fire Regimes

I	0-35 years	Ponderosa pine	low severity
II	0-35 years	Grass Shrub	stand replacement severity
III	35-100 + years	Douglas fir	mixed severity
IV	35-100+ years	Lodge pole	stand replacement severity
V	>200	Tropical	stand replacement severity

Forest Condition Classes

	Fire Return Interval	Historic Range Variability	Fire Risk	Treatment Options
I	low	low	moderate	maintenance
II	modest	medium	high	restoration
III	high	high	extreme	difficult to restore

The Healthy Forest Initiative seeks to streamline the National Environmental Policy Act (NEPA) process. The underlying assumption is that strong consensus for a proposed treatment is the best plan. By gaining consensus before going to the public for input, the public already has provided some input and is more likely to accept the proposal. There are 10 test projects investigating ways to streamline NEPA without ignoring NEPA's mandate. The challenge is not to go around the Endangered Species Act or the National Environmental Policy Act, but to find ways to get the job done more efficiently.

The Role of the Fire Education and Prevention Program

As a new program, there are many opinions of and expectations for the Fire Communications and Education Program. Among the many opinions and questions regarding the positions: are they another interpreter, another PIO, another web geek, prevention technician or fuel treatment facilitator? Projects from prevention education staff are seen as good projects, but they compete with other fire projects.

How do you evaluate successes and what are the responsibilities of prevention/education staff? There are many different interpretations of the potential and future of the role. How should Fire Education, Prevention and Information staff measure accomplishments and estimate benefits to obtain needed money for the program?

The challenge is to show successes and to communicate these successes to those with budget allocation responsibilities. Some suggestions included:

- Talk about what really worked and what techniques were used.
- Look at experiments that did not work to show that the program has looked at lessons learned.

The NPS fire education/prevention program is a resource that other agencies do not have and it must not be wasted. It is important to show what the perception of the program was, what the reality is now, and what people can expect from it in the future. Budgets will be tight in the future and it is important to establish the program or risk losing funding or support.

The National Fire Plan Operation Reporting System (NFPORS)

The National Fire Plan Operation Reporting System (NFPORS) has replaced FASTRACS to request project funding and prioritize projects. Other agencies are doing the same thing as the NPS. Go on-line with NFPORS to see what they are doing – <http://nfpors.gov>.